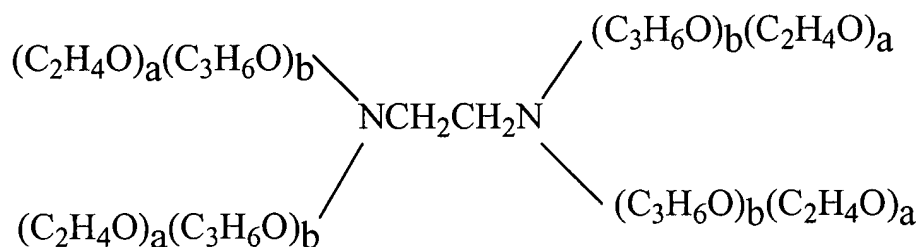


Amendments to the Claims

Listing of Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A composition comprising,
one or more nucleic acid sequences ~~molecules~~ selected from the group consisting of
~~isolated or amplified nucleic acid sequences encoding gene products, oligonucleotides,~~
~~antisense oligonucleotides, triplex DNA compounds, ribozymes, or~~ and mixtures thereof; and
an octablock copolymer, wherein the octablock copolymer has the following formula:



wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is between about 5000 and about 7000 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes between about 10% to about 40% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes between about 60% and about 90% of the octablock copolymer by weight.

2. (Previously Presented) The composition of Claim 1, wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 6750 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes about 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

3. (Previously Presented) The composition of Claim 1, wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 5750 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes approximately 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

4. (Previously Presented) The composition of Claim 1, wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 5220 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes about 10% of the octablock copolymer by weight; and

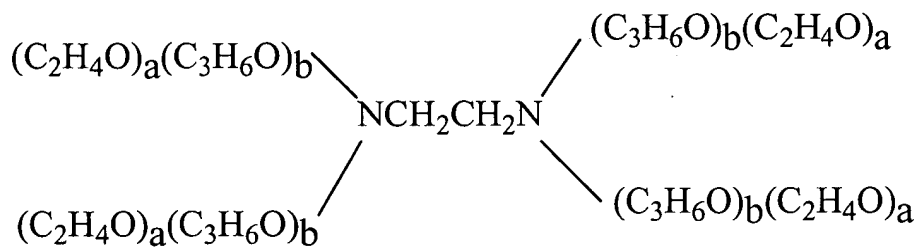
b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

5. (Currently Amended) The composition of Claim 1, wherein ~~the the one or more nucleic acid sequences molecules are selected from isolated or amplified nucleic acid sequences encoding gene products, or~~ antisense oligonucleotides.

6. (Previously Presented) The composition of Claim 1, further comprising approximately 0.1% to approximately 5% by weight of a surfactant and approximately 0.5% to approximately 5% by volume of a low molecular weight alcohol.

7. (Previously Presented) The composition of Claim 6, wherein the surfactant is polyoxyethylene (20) sorbitan monooleate and the alcohol is ethanol.

8. (Currently Amended) ~~The composition of Claim 1, further comprising an expression vector capable of expressing the nucleic acid sequences~~ A composition comprising,
one or more nucleic acid sequences which encode a gene product; and
an octablock copolymer, wherein the octablock copolymer has the following formula:



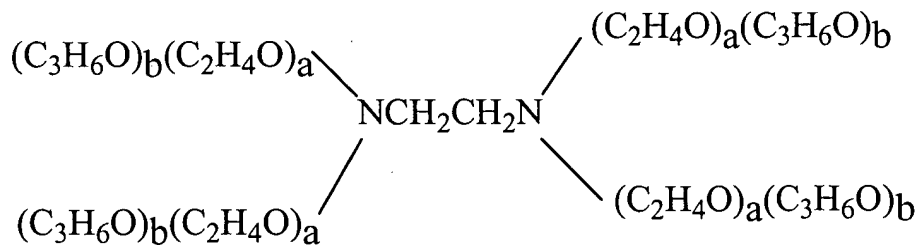
wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is between about 5000 and about 7000 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes between about 10% to about 40% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes between about 60% and about 90% of the octablock copolymer by weight.

9. (Currently Amended) A composition comprising,
one or more nucleic acid sequences ~~molecules~~ selected from the group consisting of
~~isolated or amplified nucleic acid sequences encoding gene products,~~ oligonucleotides,
antisense oligonucleotides, triplex DNA compounds, ribozymes, ~~or~~ and mixtures thereof; and
an octablock copolymer, wherein the octablock copolymer has the following formula:



wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is between about 5000 and about 7000 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes between about 10% to about 40% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes between about 60% and about 90% of the octablock copolymer by weight.

10. (Previously Presented) The composition of Claim 9, wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 6750 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes about 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

11. (Previously Presented) The composition of Claim 9, wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 5750 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes approximately 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

12. (Previously Presented) The composition of Claim 9, wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 5220 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes about 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

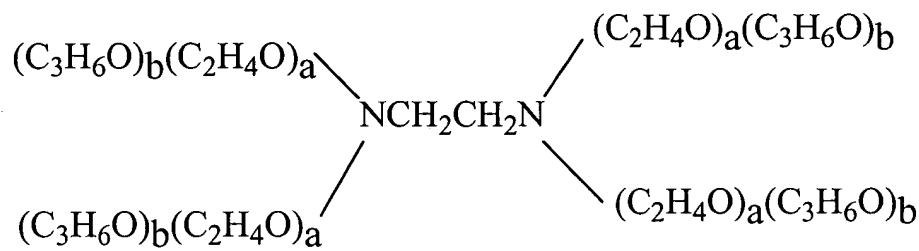
13. (Currently Amended) The composition of Claim 9, wherein the one or more nucleic acid sequences ~~molecules are selected from isolated or amplified nucleic acid sequences encoding gene products, or~~ antisense oligonucleotides.

14. (Previously Presented) The composition of Claim 9, further comprising approximately 0.1% to approximately 5% by weight of a surfactant and approximately 0.5% to approximately 5% by volume of a low molecular weight alcohol.

15. (Previously Presented) The composition of Claim 14, wherein the surfactant is polyoxyethylene (20) sorbitan monooleate and the alcohol is ethanol.

16. (Currently Amended) ~~The composition of Claim 9, further comprising an expression vector capable of expressing the nucleic acid sequences~~ A composition comprising,

one or more nucleic acid sequences which encode a gene product; and
an octablock copolymer, wherein the octablock copolymer has the following formula:



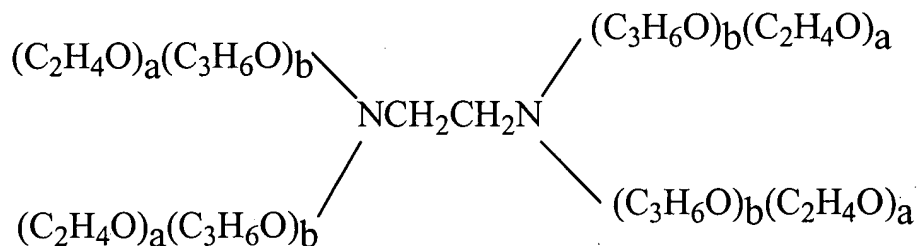
wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is between about 5000 and about 7000 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes between about 10% to about 40% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes between about 60% and about 90% of the octablock copolymer by weight.

17. (Currently Amended) A composition comprising,
one or more nucleic acid sequences ~~molecules~~ selected from the group consisting of
~~isolated or amplified nucleic acid sequences encoding gene products~~, oligonucleotides,
antisense oligonucleotides, triplex DNA compounds, ribozymes, ~~or~~ and mixtures thereof; and
an octablock copolymer, wherein the octablock copolymer has the following formula:



wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is between about 5000 and about 7000 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes between about 5% to about 20% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes between about 80% and about 95% of the octablock copolymer by weight.

18. (Previously Presented) The composition of Claim 17, wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 6750 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes about 10% of the octablock copolymer by weight; and

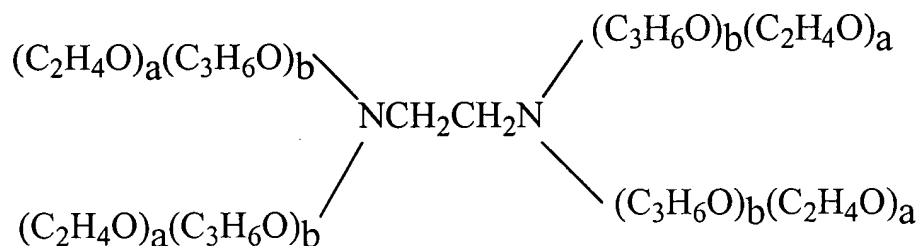
b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

19. (Currently Amended) A method of delivering a molecule to an animal comprising,

~~the step of administering to the animal a composition comprising one or more~~ nucleic acid sequences ~~molecules~~ selected from the group consisting of ~~isolated or amplified nucleic~~

~~acid sequences encoding gene products~~, oligonucleotides, antisense oligonucleotides, triplex DNA compounds, ribozymes, ~~or~~ and mixtures thereof; and

an octablock copolymer, wherein the octablock copolymer has the following formula:



wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is between about 5000 and about 7000 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes between about 10% to about 40% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes between about 60% and about 90% of the octablock copolymer by weight.

20. (Previously Presented) The method of Claim 19, wherein

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 6750 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes about 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

21. (Previously Presented) The method of Claim 19, wherein

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 5750 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes approximately 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

22. (Previously Presented) The method of Claim 19, wherein

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 5220 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes about 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

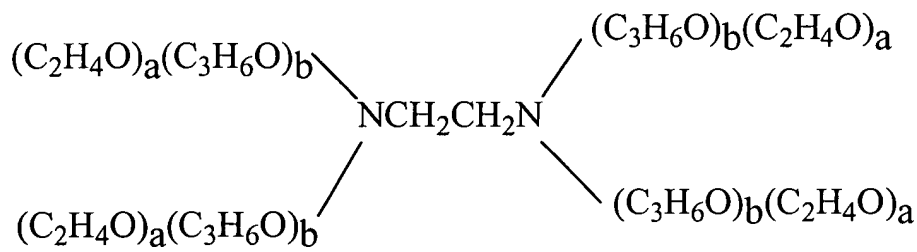
23. (Currently Amended) The method of Claim 19, wherein the one or more nucleic acid sequences ~~molecules are selected from isolated or amplified nucleic acid sequences encoding gene products, or~~ antisense oligonucleotides.

24. (Previously Presented) The method of Claim 19, wherein the composition further comprises approximately 0.1% to approximately 5% by weight of a surfactant and approximately 0.5% to approximately 5% by volume of a low molecular weight alcohol.

25. (Previously Presented) The method of Claim 24, wherein the surfactant is polyoxyethylene (20) sorbitan monooleate and the alcohol is ethanol.

26. (Currently Amended) ~~The method of Claim 19, wherein the composition further comprises an expression vector capable of expressing the nucleic acid sequences~~ A method of delivering a molecule to an animal comprising,

administering to the animal a composition comprising one or more nucleic acid sequences which encode a gene product, and an octablock copolymer, wherein the octablock copolymer has the following formula:



wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is between about 5000 and about 7000 Daltons;

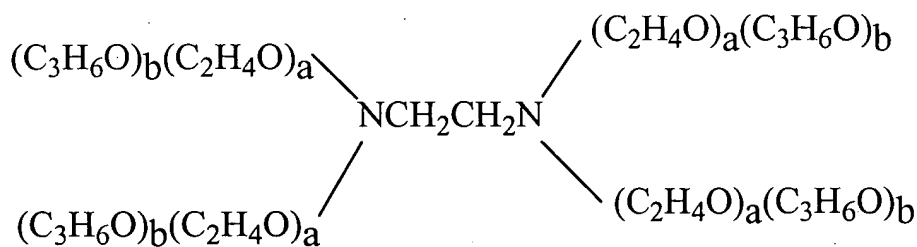
a is a number such that the portion represented by polyoxyethylene constitutes between about 10% to about 40% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes between about 60% and about 90% of the octablock copolymer by weight.

27. (Currently Amended) A method of delivering a molecule to an animal comprising,

~~the step of~~ administering to the animal a composition comprising one or more nucleic acid sequences ~~molecules~~ selected from the group consisting of ~~isolated or amplified nucleic acid sequences encoding gene products,~~ oligonucleotides, antisense oligonucleotides, triplex DNA compounds, ribozymes, ~~or~~ and mixtures thereof; and

an octablock copolymer, wherein the octablock copolymer has the following formula:



wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is between about 5000 and about 7000 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes between about 10% to about 40% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes between about 60% and about 90% of the octablock copolymer by weight.

28. (Previously Presented) The method of Claim 27, wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 6750 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes about 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

29. (Previously Presented) The method of Claim 27, wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 5750 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes approximately 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

30. (Previously Presented) The method of Claim 27, wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 5220 Daltons;

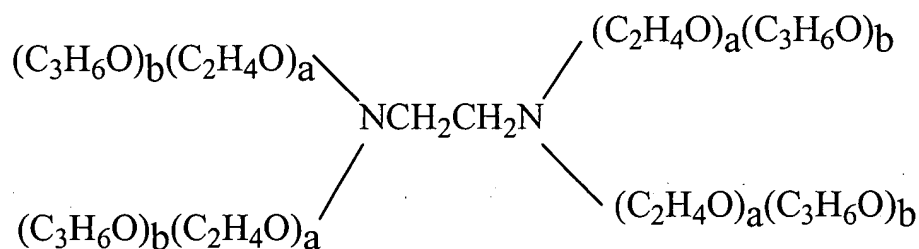
a is a number such that the portion represented by polyoxyethylene constitutes about 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

31. (Currently Amended) The method of Claim 27, wherein the one or more nucleic acid sequences ~~molecules are selected from isolated or amplified nucleic sequences acid encoding gene products, or~~ antisense oligonucleotides.

32. (Previously Presented) The method of Claim 27, wherein the composition further comprises approximately 0.1% to approximately 5% by weight of a surfactant and approximately 0.5% to approximately 5% by volume of a low molecular weight alcohol.

33. (Currently Amended) A method of delivering a molecule to an animal comprising, ~~the step of~~ administering to the animal a one or more nucleic acids sequences ~~molecules selected from the group consisting of isolated or amplified nucleic acid sequences encoding gene products,~~ oligonucleotides, antisense oligonucleotides, triplex DNA compounds, ribozymes, ~~or~~ and mixtures thereof; and an octablock copolymer, wherein the octablock copolymer has the following formula:



wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is between about 5000 and about 7000 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes between about 5% to about 20% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes between about 80% and about 95% of the octablock copolymer by weight.

34. (Previously Presented) The method of Claim 33, wherein
the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 6750 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes about 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

35. (Previously Presented) The method of Claim 33, wherein
the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 5750 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes approximately 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

36. (Previously Presented) The method of Claim 33, wherein:
the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 5220 Daltons;

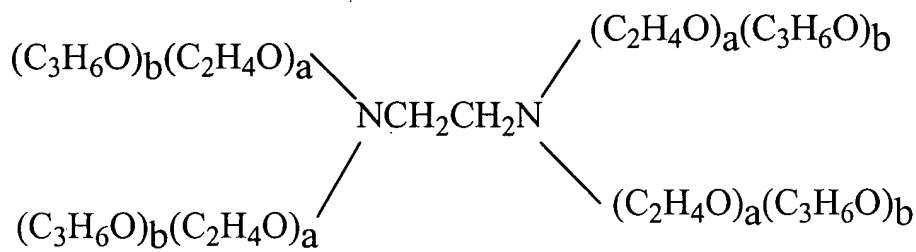
a is a number such that the portion represented by polyoxyethylene constitutes about 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

37. (Previously Presented) The method of Claim 32, wherein the surfactant is polyoxyethylene (20) sorbitan monooleate and the alcohol is ethanol.

38. (Currently Amended) ~~The method of Claim 27, wherein the composition further comprises an expression vector capable of expressing the nucleic acid sequences~~ A method of delivering a molecule to an animal comprising,

the step of administering to the animal a composition comprising one or more nucleic acid sequences which encode a gene products, and
an octablock copolymer, wherein the octablock copolymer has the following formula:



wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is between about 5000 and about 7000 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes between about 10% to about 40% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes between about 60% and about 90% of the octablock copolymer by weight.

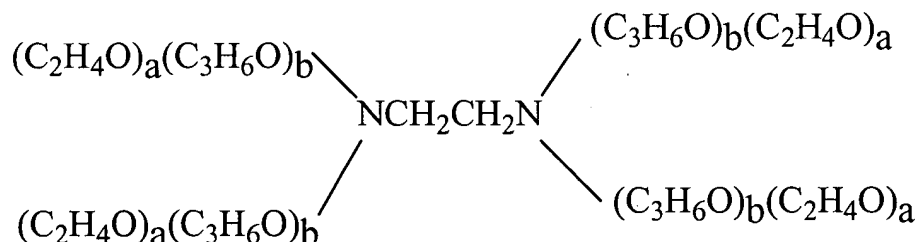
39. (Previously Presented) The composition of Claim 17, wherein the polyoxypropylene portion of the total molecular weight of the octablock copolymer is greater than 90% and less than about 95%.

40. (Previously Presented) The method of Claim 33, wherein the polyoxypropylene portion of the total molecular weight of the octablock copolymer is greater than 90% and less than about 95%.

41. (Currently Amended) A composition comprising,
one or more nucleic acid sequences ~~molecules~~ selected from the group consisting of ~~isolated or amplified nucleic acid sequences encoding gene products,~~

oligonucleotides, antisense oligonucleotides, triplex DNA compounds, ribozymes, ~~or~~ and mixtures thereof; and

an octablock copolymer, wherein the octablock copolymer has the following formula:



wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is between about 5000 and about 7000 Daltons;

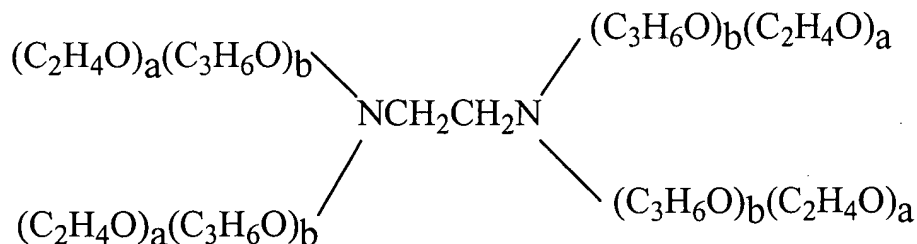
a is a number such that the portion represented by polyoxyethylene constitutes between about 5% to about 20% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer is greater than 90% 80% and less than about 95% of the octablock copolymer.

42. (Currently Amended) A method of delivering a molecule to an animal comprising,

~~the step of~~ administering to the animal a composition comprising one or more nucleic acid sequences ~~molecules~~ selected from the group consisting of isolated or amplified nucleic acid sequences encoding gene products, oligonucleotides, antisense oligonucleotides, triplex DNA compounds, ribozymes, ~~or~~ and mixtures thereof; and

an octablock copolymer, wherein the octablock copolymer has the following formula:



wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is between about 5000 and about 7000 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes less than 10% and more than about 5% ~~between about 5% to about 20%~~ of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer is greater than 90% and less than about 95% of the octablock copolymer.